(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification[7]: H04B 10/08, G01M 11/00

(21) International Application Number:
PCT/EP2002/010285

(22) International Filing Date:
13 September 2002 (13.09.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): AGILENT TECHNOLOGIES INC. [US/US]; 395 Page Mill Road, Palo Alto, CA 94306 (US).

(72) Inventor; and
(75) Inventor/Applicant (for US only): HAISCH, Hansjoerg [DE/DE]; Greutweg 33, 71155 Altdorf (DE).

(74) Agent: BARTH, Daniel; Agilent Technologies Deutschland GmbH, Patentabteilung, Herrenbergerstrasse 130, 71034 Böblingen (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CODED POLARIZATION-DEPENDENT ANALYZING
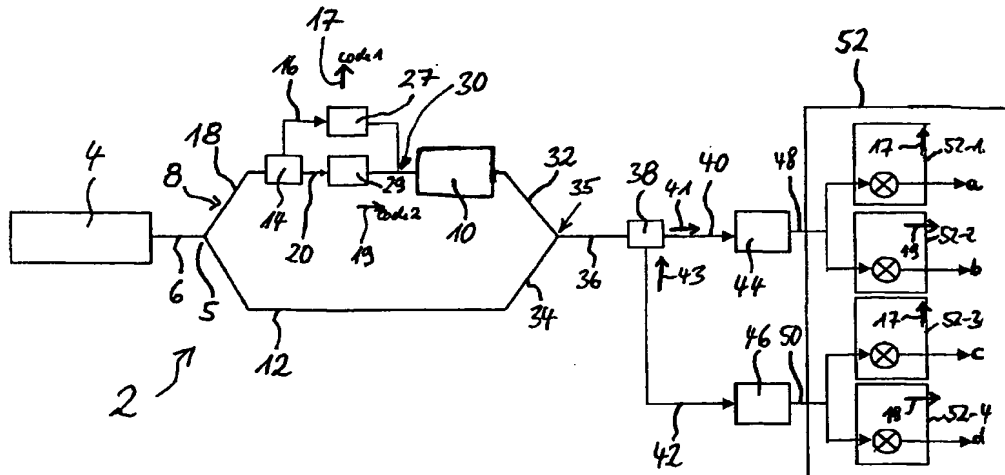
(57) Abstract: The present invention relates to an apparatus and to a method of polarization dependent analyzing an optical signal (6) transmitted through a DUT (10), comprising the steps of: splitting the optical signal (6) into a first signal part (16) having an initial first polarization and a second signal part (20) having an initial second polarization, coding the first signal part (16) using a first code (17, code 1) and coding the second signal part (20) using a second code (17, code 2), providing the coded signal parts (16, 6a, 20, 6b, 6c, 6d) to the DUT (10), detecting a DUT signal (32) coming from the DUT (10) in response to the coded signal parts (16, 6a, 20, 6b, 6c, 6d), and determining a first part (a, c) of the DUT signal (32) corresponding to the first signal part (16) by means of the first code (17, code 1) and determining a second part (b, d) of the DUT signal (32) corresponding to the second signal part (20) by means of the second code (17, code 2).